

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **05302182 A**(43) Date of publication of application: **16.11.93**

(51) Int. Cl.

C23F 4/00**F03G 7/00****H01L 21/302****H02N 1/00**(21) Application number: **04302734**(22) Date of filing: **13.11.92**(30) Priority: **25.02.92 JP 04 36779**(71) Applicant: **FUJI ELECTRIC CO LTD**(72) Inventor: **GOTOU TOMOAKI**

(54) PRODUCTION OF COMB-SHAPED ACTUATOR

(57) Abstract:

PURPOSE: To control the interelectrode gap to the μm order by forming the combined comb-shaped movable electrode and fixed electrode from a substrate.

CONSTITUTION: A silicon substrate 1 coated with an Al mask 4 or a silver oxide-film mask is dry-etched with a mixture of gaseous SF_6 and O_2 and worked. Consequently, the recesses 51 and 52 having a vertical side wall and a throughhole 53 are formed, and a comb-shaped actuator consisting of a movable part having optional shape and size and a fixed part is obtained. Further, a silicon oxide film as an etching stop layer is embedded in the substrate to attain higher-precision working.

COPYRIGHT: (C)1993,JPO&Japio

